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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,903	02/01/2005	Stephanie Frahn	264742US0X PCT	7011
22850	7590	11/09/2009		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER NERANGIS, VICKY MARIE	
			ART UNIT	PAPER NUMBER
			1796	
			NOTIFICATION DATE	DELIVERY MODE
			11/09/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/522,903	Applicant(s) FRAHN ET AL.	
	Examiner Vickey Nerangis	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2 and 6-22 is/are pending in the application.
- 4a) Of the above claim(s) 14-17 and 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2, 6-13 and 18-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. All outstanding rejections, except for those maintained below, are withdrawn in light of applicant's amendment filed on 7/13/2009.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.
3. The new grounds of rejection set forth below are necessitated by applicant's amendment filed on 7/13/2009. In particular, claim 2 has been amended to claim that the silica has a specific tamped density, and claims 21 and 22 are new. Thus, the following action is properly made final.

Election/Restrictions

4. Newly submitted claim 22 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: it is dependent on a non-elected invention.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 22 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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5. Claims 2, 6-13, and 18-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With respect to claims 2 and 21, a silanized, structurally modified pyrogenic silica having a tamped density of 123-322 g/L (or 146-322 g/L) fails to satisfy the written description requirement of 35 USC 112, first paragraph since there does not appear to be a written description requirement of a tamped density through the range of 123-322 g/L (or 146-322 g/L) in the application as originally filed, *In re Wright*, 866 F.2d 422, 9 USPQ2d 1649 (Fed. Cir. 1989) and MPEP 2163. While there is support for silanized, structurally modified pyrogenic silica having a tamped density of 123, 146, and 322 g/L in Table 2 on page 9 of the specification, such examples cannot support all points in between for the entirety of the range 123-322 g/L (or 146-322 g/L).

With respect to claims 3-13 and 18-20, they are rejected for being dependent on a rejected claim.

Claim Rejections - 35 USC § 102

6. Claims 2, 6, 9, 13, 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Frahn (US 2002/0077381).

Frahn discloses a composition comprising 1-20 wt % silica which is exemplified being treated with hexamethyldisilazane and having tamped density of 188 g/L (paragraph 0017) and a

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binder such as exemplified ethoxylated pentaerythritoltetracrylate or epoxyacrylate (paragraph 0021 and 0024). Frahn also teaches other additives (paragraph 0010)

In light of the above, it is clear that Frahn anticipates the presently cited claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2, 6-13, and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bock (US 6,020,419) in view of Hartmann (US 5,959,005).

Bock discloses a coating composition comprising 0.5-25 wt % based on solids of hydrophobic, pyrogenic silica, a binder such as one of polyester, and polyacrylate, polyol (col. 4, lines 13-26 and col. 5, lines 1-29), and pyrogenic silica and solvent such as aromatic and aliphatic hydrocarbons (col. 6, lines 17-30). The pyrogenic silica is treated with octyltrimethoxysilane or dimethyldimethoxysilane, which provides for octylsilyl and dimethylsilyl groups on the surface of the pyrogenic silica and hexamethyl-disilazane which provides for hexadecylsilyl and alkyl silyl groups (col. 3, lines 60-67). Additives are also used (col. 6, line 60 to col. 7, line13). See examples.

Bock fails to disclose the tamped density of the pyrogenic silica.

Hartmann discloses hydrophobicized pyrogenic silica and teaches that when silica is subjected to a destructing/compressing and grinding process, a silica is provided which has a tamped density of 50-300 g/L and has improved low-thickening properties, high degrees of

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filling and good mechanical strengths (col. 1, line 61 to col. 2, line 7). The exemplified silica has a tapped density of 188 g/L (col. 2, line 27).

Given that Bock discloses hydrophobicized pyrogenic silica and further given that hydrophobicized pyrogenic silica is given advantageous properties upon destructing/compressing and grinding processes as taught by Hartmann, it would have been obvious to one of ordinary skill in the art to subject the silica of Bock to the processes of Hartmann and thereby arrive at composition comprising a silica having tamped density like claimed.

Response to Arguments

8. Applicant's arguments filed 7/13/2009 have been fully considered but they are not persuasive. Specifically, applicant argues that the pyrogenic silica of Bock does not have the presently claimed tamped density as evidenced by Aerosil® internet publication;

In response, while Bock does disclose the use of Aerosil® silica that have tamped density below what is claimed, the rejection over Bock has been revised to teach treatment of the silica with a process taught by Hartmann which provides for the presently claimed tamped density.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Nerangis whose telephone number is (571) 272-2701.

The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

vn

/Vickey Nerangis/
Primary Examiner, Art Unit 1796